

# Ocean Surveyor/Observer Setup Card

## 1. Documentation

All documentation is being provided to you on CD in a fully searchable, printable, electronic format. This way, information is always available, whether you are at the office or in the field, and the electronic format is an environmentally friendly way to provide a large set of technical manuals. The documentation for each software program is located on the software program's CD.

To purchase a printed copy of the system documentation (includes the Ocean Surveyor/Observer Technical Manual, User's Guide, Command and Output Data Format Guide, and software guides), contact our Customer Service department at [rdifs@rdinstruments.com](mailto:rdifs@rdinstruments.com) or call (858)-693-1178 and order the Ocean Surveyor/Observer Technical Manual kit (P/N 75AK6010-00).

## 2. Unpacking and Inventory

When unpacking, use care to prevent physical damage to the transducer faces and connector. Use the protective cover and a soft pad to protect the transducer. When handling any electronics modules, follow electrostatic discharge (ESD) prevention measures.

Use the following figure to ensure you have all of the Ocean Surveyor/Observer equipment.

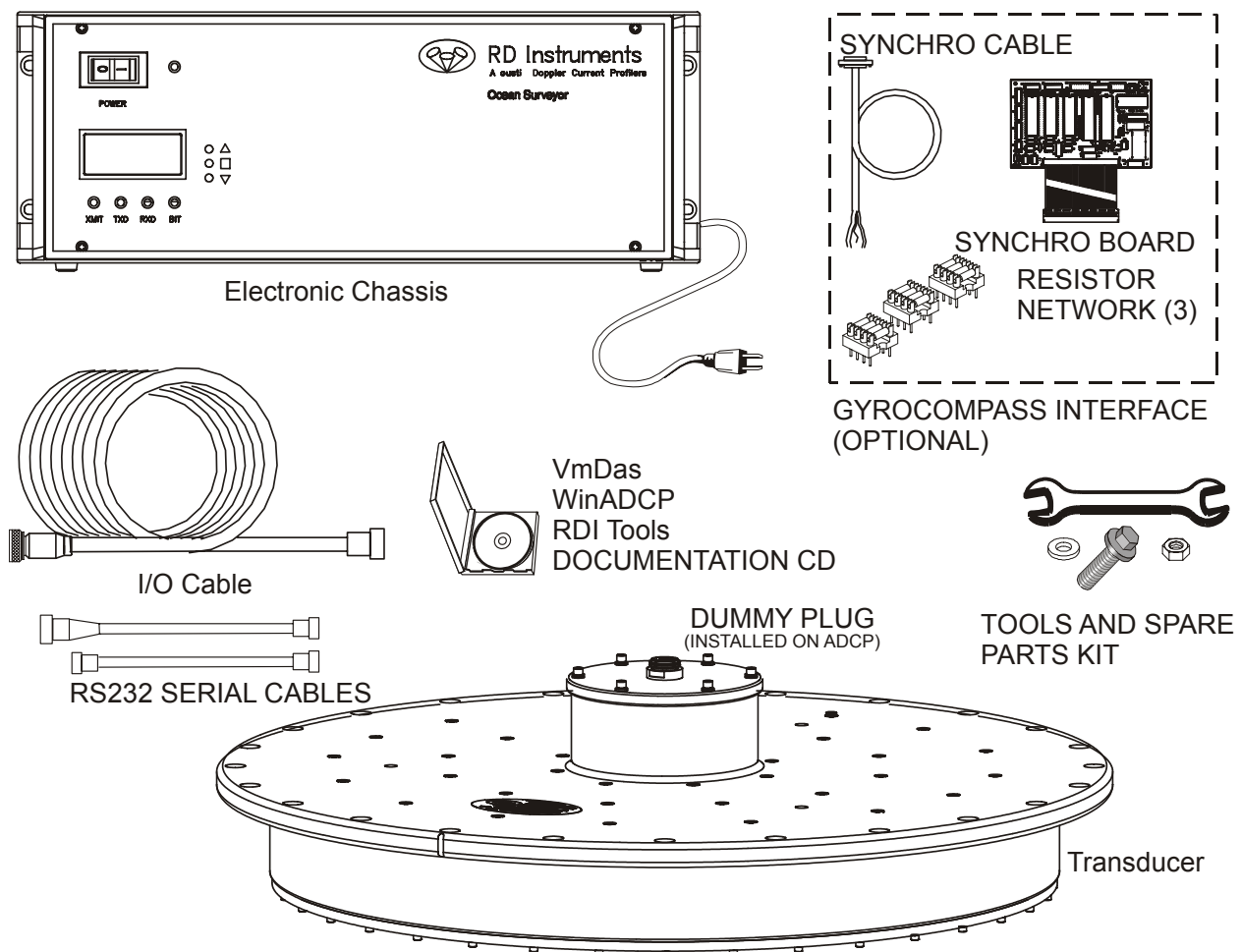


Figure 1. Ocean Surveyor/Observer Inventory

### 3. Set Up the Ocean Surveyor/Observer

Use this figure to connect the Ocean Surveyor/Observer to a computer for a bench test. Refer to the Ocean Surveyor/Observer Installation Guide for more details on system interconnections.

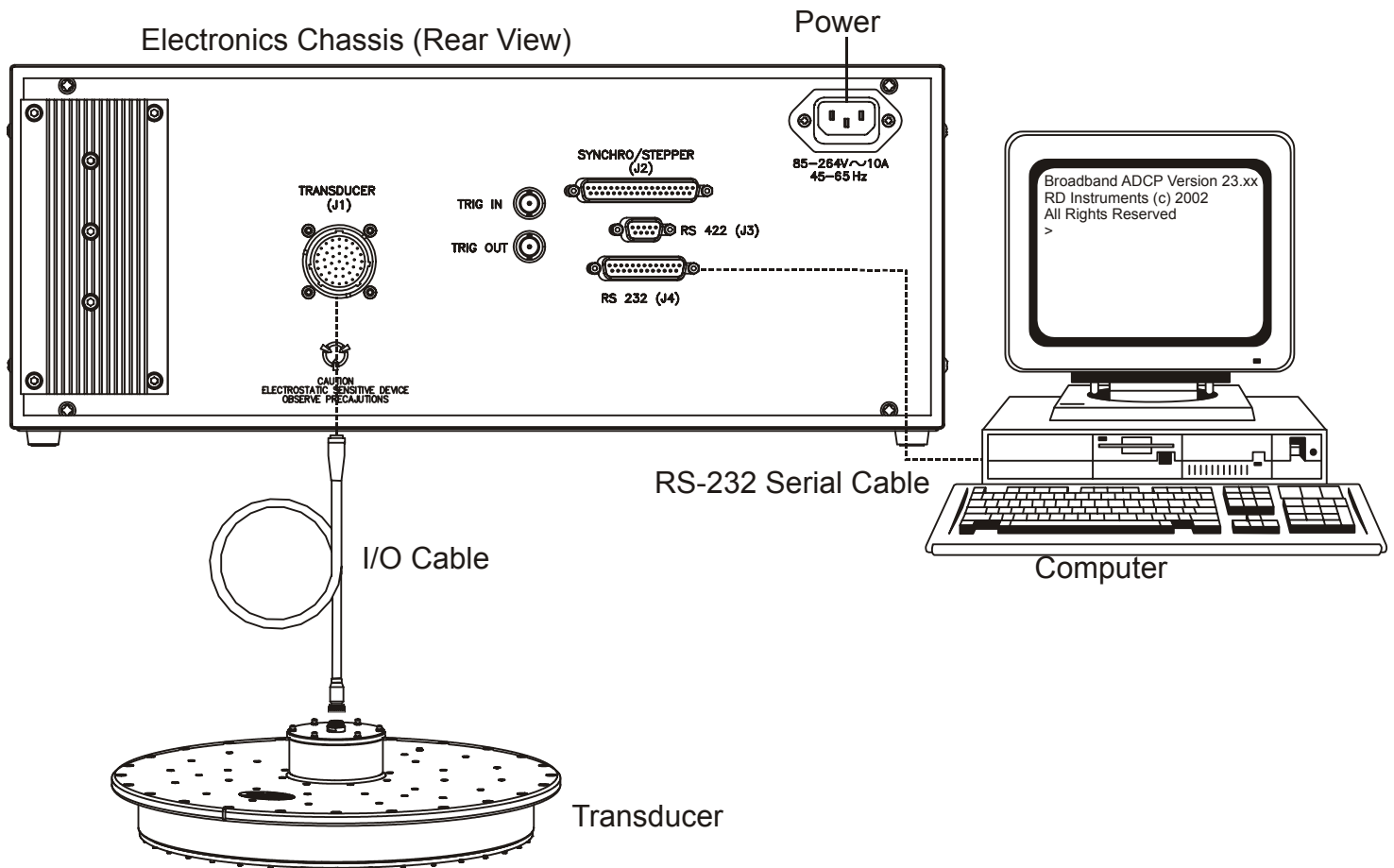


Figure 2. Ocean Surveyor/Observer Connections for Bench Test

### 4. System Requirements

RD Instruments software requires the following:

- Windows 95®, Windows 98®, Windows NT 4.0® with Service Pack 4 installed, Windows 2000®, or Windows XP®
- Pentium class PC 233 MHz (350 MHz or higher recommended)
- 32 megabytes of RAM (64 MB RAM recommended)
- 6 MB Free Disk Space plus space for data files (A large, fast hard disk is recommended)
- One Serial Port (two or more High Speed UART Serial Port recommended)
- Minimum display resolution of 800 x 600, 256 color (1024 x 768 recommended)
- CD-ROM Drive
- Mouse or other pointing device

## 5. Install the Software

To install the software, do the following.

- a. Insert the compact disc into your CD-ROM drive and then follow the browser instructions on your screen. If the browser does not appear, complete Steps “b” through “d.”
- b. Click the **Start** button, and then click **Run**.
- c. Type **<drive>:launch**. For example, if your CD-ROM drive is drive D, type **d:launch**.
- d. Follow the browser instructions on your screen. Once, installed, you will have a shortcut to the program added to your Windows® **Start** menu.

## 6. Test the Ocean Surveyor/Observer

*BBTalk* (included on the RDI Tools CD) will establish communications with the system and is used to run the System Test to make sure the ADCP is functioning properly. If you have questions about *BBTalk* operation, see the [RDI Tools User's Guide](#).

- a. Connect the ADCP as shown in Figure 2. Place the transducer in a bucket of water (enough water to cover the transducer head). If the transducer is not placed in water, some of the tests will fail.
- b. Start the *BBTalk* program.
- c. Press **<F2>** and run the script file *TestOS.rds*. The results of the tests will be printed to the screen and saved to the log file *OS\_RSLTS.txt*. The *OS\_RSLTS.txt* file will be created in the same directory that *BBTalk* is running from.

## 7. Ocean Surveyor/Observer Care

This section contains a list of items you should be aware of every time you handle, use, or deploy your Ocean Surveyor/Observer. *Please refer to this list often.*

### General Handling Guidelines



**CAUTION.** Do NOT ping the Ocean Surveyor/Observer with the transducer in air. The power assembly board will short, causing the electronics chassis to no longer communicate. The transducer is pinged by sending a CS or PT5 command or if *VmDas* is started for collecting data – either of these methods will cause damage if the transducer is in air.

- Never set the transducer on a hard or rough surface. The urethane face may be damaged.
- Do not expose the transducer to prolonged sunlight. The urethane face may develop cracks. Cover the transducer face on the Ocean Surveyor/Observer if it will be exposed to sunlight.
- Do not scratch or damage the O-ring surfaces or grooves. All O-ring grooves and surfaces must be inspected for scratches or damages on every re-assembly. If scratches or damage exist, they must be sanded out using 400 to 600 grit sandpaper. If the damage cannot be repaired, contact RDI. Do not risk a deployment with damaged O-ring surfaces.
- Do not lift or support an Ocean Surveyor/Observer by the external I/O cable. The connector or cable will break.

## Assembly Guidelines

- Always check that the I/O cable (wet end) O-rings are in place when connecting the I/O cable to the transducer. These O-rings have a tendency to fall out if the cable connector is dropped.
- Read the [Maintenance guide](#) for details on Ocean Surveyor/Observer re-assembly. Make sure the top hat assembly O-rings stay in their groove when you re-assemble the Ocean Surveyor/Observer. Tighten the Top Hat hardware as specified. Loose, missing, or stripped Top Hat mounting hardware or damaged O-rings can cause the Ocean Surveyor/Observer transducer to flood.

## Deployment Guidelines

- Read the *VmDas* User's Guide. This guide has a tutorial to help you learn how to use the ADCP.
- Use the default Command Files (included on the *VmDas* CD) to help setup the ADCP.

## 8. How to Contact RD Instruments

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